

Nº 132639

E. P. Killip

to Dr. H. M. Bassler, Iquitos, Peru.

or

U. S. Consul, Para, Brazil

or

Smithsonian Institution, Washington,
D.C.

Diary of Peruvian Trip, 1929.

Vol. II.

1929.

Sat. Aug. 17. Final day at Iquitos before leaving for upriver. Finished going over the Lessmann Herbarium, photographing 93 types in all. Found no specimen of "cube" but in J's notebook were two references to "barbado" and "barbado legitimo." These numbers doubtless only at Berlin. Wrote Harris asking ~~for~~ ^{that} names and photos of these he sent Washington. Packed and sent baggage to dock in mule-cart. Made final visits to the clubs and, with several additional drinks at dinner, boarded ship in gay mood. First time I ever sailed at night. The "Alberto" is the largest boat of the upper Amazon, and was brilliantly lighted and crowded with passengers and their friends. D. and Dr. Augustin, a German of Iquitos who speaks the most perfect English of any foreigner we have met here, came to see us off. Had Camarote 7, a 4-berth room, but with only one other passenger. The berths are long enough even for us.

Sun. Aug. 18. All day proceeding up the Amazon. About 4 p.m. reached a clearing close to the junction of the Marañon and Ucayali, where the Amazon begins. Tried to buy oranges and beer but tho' they were both on hand, no one wanted to take the trouble to sell them. (Our boat is bone-dry. Last night the "barboy" assured us there was plenty of beer on board, but apparently there were only 6 bottles, and passengers finished these last night. Beer costs 1.50 soles or 60¢ U.S.C., too dear for most passengers, as it doesn't pay the boat to carry much.) There were many peons at this tienda, buying pises. We stayed an interminable time at this place, and as the sun set, the view of the beginning of the Amazon became very colorful. However, I would scarcely use the flowery language of one writer in describing this junction point. The "Beatriz," which had passed us and been passed by us frequently all day, came up and went on up to Ucayali while

we went up the Marañon. We gave no mournful farewells to that ship, as the trip from Marañon on it had not been particularly enjoyable.

Mon. Aug. 19. As the "Alberto" is a wood-burner about four stops are made within each 24 hours to take on wood. Naturally these stops are at clearings and collecting may or may not be good. About 10 A.M. we reached a place near the mouth of the Rio Tigr, where, in a short time, we got about 25 numbers. A few hours later, at a long stop, we collected only about half a dozen things, yet in both cases the woods looked equally good. At this latter stop I found a tree of Paurotum cut down but ~~fully~~ covered with the worst ants I have ever met with. Their bite is like a bee's sting. I applied mud and ~~the~~^{the} pain soon left. The rest of the day was uneventful. These steamer trips are very stupid. The passengers are mediocre, but the

shower and wash basin and show little of the thoughtfulness ^{that} passengers on a crowded ship usually do. Another pair of clippers stolen, left them on a table for five seconds alone, and someone gyped them. Al and I wrote part of an article on habitats.

Tues. Aug. 20. We are making better time; only two stops and these in such uninteresting places that we did not get off. Rained nearly all day and quite cool. Had to get out heavy clothes and blankets. Wrote Miss Shields.

Wed. Aug. 21. Were on the Rio Huallaga when we woke, a narrower stream than the Marañon, with much cleared land, at least toward its mouth. Sun is shining. Good news! The dispensary just told me they had taken on a supply of beer. So we had some.

Thurs. Aug. 22. Stopped at Puerto Arturo, a sugar plantation owned by Dr. Iberico, a Cornell graduate. Invited us to visit him and collect around there. At 10:30

docked at Yurumangas. Big crowd gathered on shore. Y. is built on the banks of the river, showing quite a collection of thatched roofs. Waited till the subprefect made his appearance, passing thru the crowd and onto the gang-plank with a good deal of ceremony. He is very simpatico. Within 20 minutes after landing we had rented a big room from Dr. Miguel Costa, with a big patio behind, and we have the use of his shower; had presented a letter to Kahn y Cia., who will get us porters for Tarapoto; and had obtained a local boy for guide (1.50 a day). Put up stove and in pm (after lunch at Hotel Mayo) went back of town to collect. The days of idleness at Iquitos and on the boat had ruined me and I had no pep. The vegetation looked most ordinary - Amazonian species.

Fri. Aug. 23. Al and the two boys went off on an all-day canoe trip while I worked on yesterday's plants.

Found those collected by Al small,
more than $3/4$ of the whole (70 in all).
Wrote G. E. G., note to W. R. W., Perry, & finished
Joyce's letter.

Sat. Aug. 24. Went with the two boys to
Punto Arturo, a short paddle down &
across-stream. Went to forest back of
plantation, a ~~low-lying~~ woods rather
dry (not like the terribly wet palm
jungles where there is little) and had
fine collecting. Few Melastomes or Rubus
but many trees and tall shrubs which
I did not recognize; many with round
or ovoid fruits ± 1.5 cm. in diameter.

Wonder what they can be; many
tricky aroids, of Philodendron type.
Bash about 3 p.m., and after coffee
shook upstream along shore. Woods
looked good but it was late and the
mosquitoes were coming on. Played
Casino with Dr. Iberico, his wife, and
a girl friend. A foolish game, and
the insects were terrible.

Sun. Aug. 25. Tony and I went back to
the place last reached yesterday p.m.
and continued on to a large chacra
near the river. Many things different
from yesterday. Lot of numbers off
a big palm tree. All the time I felt
tired and weak under my knees.
Got back at 11:30, all too early but
we were finding little new, and I felt
rotten. Several guests at dinner.
Paddled home about 3 p.m., a 2-hour
hard-going upstream. Al returned a
little later, having visited a barbecue
and gotten several paquetes en route.

Mon. Aug. 26. Worked all day on
my plants and in evening on part of
Al's. Bothered by the poor condition
of the "boards", as it takes about
12 hours longer to dry average specimens.
I got 221 numbers in the day and a
half - no conscious duplication.
Al and the two boys with a Cargadero
left for Balaoaperto, a 6-day trip.
Rained hard soon after they started.

Tues. Aug. 27. Woke up about 3 am. with a bad chill. Can it be malaria? Took 15 grains of straight quinine and three pills of plasmoquin. All this gave me terrible head when I finally got up. My hands were so numb I couldn't tell if plants from the stove were dry. Continued to put in Al's plants, but saw out of driers, and had to wait ^{the} last of package until enough could be got off a stove. ^{Lanares} Came back at 8 pm with 6 bundles from Al's first day. Man brought in 12 mangas of "inbe" roots (pd 2.50).

Wed. Aug. 28. Worked ~~all day~~ on Al's plants. Boy arrived in evening with 5 more bundles. In am. Lanares and I found time for a short ride back of Yurimaguas. Lot a few plants. Saw a large barbasco of about 500 plants; owner -

Thurs. Aug. 29. Finished Al's plants and my own of yesterday. These days not very interesting; only kick from seeing what he

got and reading his letters. I leave the room only for meals. Hot sunny weather, fine for drying driers.

Fri. Aug. 30. Had a visit from Sr. Hermann Augustin, nephew of our friend in Iquitos who has been in charge of work of clearing the ferrovia. Job has been called off - temporarily, only, I hope - so he is hanging around ¹⁶ j. waiting for orders. He will arrange for me to work the ferrovia region. In pm. Lanares and I walked out to Portaleza, the first hacienda on the road to Balsapuerto, owned by Sr. Eugenio Pardo, one of the most likable hosts I have met here. He promised to arrange a barbasco-fishing party for us. He serves his guests with much fruit, piña, papaya, watermelon, etc.

Sat. Aug. 31. Rather an easy day as no plants came from Al till ^{when 16 probably arrived} 7 pm. Fired up yesterday's small collection, got haircut, etc. Augustin and his brother Karl and I threw a small party in the park.

Sun. Sept. 1. The Augustins took me over to Santa Rosa, about 2 1/2 hours walk north. The trail runs thru dense forest, cutting across the peninsula. Part of the way was paddling up the Rio Paranapura. Sta. Rosa is an Hacienda reminding me a little of Rto. Yacampi; it is on the Rio Huallaga; ~~on~~ ^{near} the name.

She was very simpatica. In pm, went out to begin of r. r. cutting, a slash, nearly straight, thru the jungle, 100 meters wide. The r. r. is planned to run to the Pongo of Marseriche, then west to Pasamayo. Here it well illustrates the rapidity of tropical growth. At this point near Santa Rosa the land was cleared last October; now it is so grown over with shrubs and small trees that progress thru it is almost impossible, and no trail has been kept open.

Mon. Sept. 2. Celebrated my birthday very quietly, a glass of chicha being the only drink. Spent all day on the trail over to Linón, up the Paranapura River. Good woods. Once we heard wood-cutting so

went over. Had hopes of finding cube in flower among the tops of the fallen high trees, but was unsuccessful, tho the plant was growing as a small shrub in the woods at the edge of the clearing. Antonio and two men to be my cargadores and guides arrived in pm. and we packed for the trip, Sir. A. having told us to help ourselves to his left-over stores.

Tues. Sept. 3. Left Sta. Rosa about 6:30 AM, paddling down to next bend in river. Took troche thru woods to rr. clearing. Here the vegetation has not yet had a chance to grow up again but I was rather disappointed in finding that the tops of the fallen trees had been burnt up. The logs not yet dry enough to burn, ~~the~~ rapid progress thru the clearing as the troche follows in the woods alongside. There is an abandoned camp at about Km. 15, another at Km. 20, and the first one at Km. 25 (all measuring from Yurinejers).

Reached Km. 20 about 11 am, and lunch. The camp consists, like the other camp, of 4 or 5 low shacks, sleeping quarters, kitchen, eating camp, etc. Was impressed with their cleanliness. How different are the deserted lumber camps in the Adirondacks! In the pm. we followed various troches and made some progress along the clearing. Had had visions of chopped down trees with swell opportunity of collecting on them, but impossible! I have five boys with me, quite a formidable party; they are needed to carry food, bedding, and specimens. They dish up fine meals. One has a gun and many turkeys are shot. Also they get turtles. This was one of the memorable nights, here in a long narrow clearing, with the dense jungle all around. Many birds singing and the croaking of frogs. We all slept in one shack in the center as tigers often come into the outer shacks at night. The boys say

and played games. Some lumber expert should be here. The boys discuss the various fallen trunks of giant trees, giving their local (Quechua) names and particular uses. As material for herbarium specimens is lacking in most cases, I did not make any record of their talk. A big tree "aguano" (mahogany) was being burned out for a canoe; interesting how they put wet palm leaves around the parts not to be burned.

Wed. Sept 4. Left camp about 6:30 am, four hours later reaching the end of the clearing at Km. 25. Rather tiresome walk as there palms predominate and in palm jungles, as in pine woods home, ~~nothing~~ ^{little} else grows. Camp Km. 25 is on the far bank of the Rio Sapote, to ford which we went a short distance east of the camp. After lunch continued down the troche thru the uncut part of the right-of-way, but got little. After

a swim took press alone and got quite a lot.
Thurs. Sept. 5. Left camp at 6 am, having taken an early swim. Tony and Trapido, about to the canoes. Didn't wait till men arrived and we paddled back to Sta. Rosa for lunch. Then up river, the 5 paddlers grabbing plants I pointed out on the bank and leaving them in my lap. Was well covered with ants but we got several new things. Landed at a house said to be on $\frac{1}{2}$ hour (really an hour) from one of the Acostas' houses. Got back to Yurimaguas at 7 pm. Al had returned the preceding Sunday. Had a celebration with many beers and talked over future plans. We have been planning to go to Tarapoto, Spruce's famous locality, a 5-day trip from here. On my trip to the ferrovía I found I got tired out as completely after a ~~short~~ few hours walk, and tho no fever attack had come since that of Aug. 27, I simply did not feel like taking the trip. There were other reasons, such as the poor condition of our much-used boards and press-ends and the lack of mail for many months from Washington with instructions.

and information about "cube." So go to Tarapoto would mean much shortened time in Pará and Manaos. So tho I knew Al was disappointed we decided to take the first boat back to Iquitos, work up the Rio Itaya a few days, and the first boat to Manaus and Pará.
Fri. Sept. 6. Worked on my plants all day tho feeling rather low.

Sat. Sept. 7. Al went out in am. along a trail near the Tarapoto road. I cleaned dices, etc. We have quite a lot of plants ready for the stores.

Sun. Sept. 8. Left before breakfast for Portaleza for a day of fishing with barbares as guests of Dr. Pardo. Near his house is a long narrow lake, somewhat semicircular in shape. Three or four streams flow into it. News of the event had brought natives from near and far; the neighbors came in canoes, those from Yurimaguas and other places brought nets or spears. We went by canoe to the mouth of a small stream, then waited some time while different

(This is mashed up by pounding with a heavy stick)

men arrived with mashed up barboscs. Altogether 100 manojas (about 150 Kg) were used. There were 10⁷ canoes, about 9 of which were used in the actual poisoning of the water. The mashed barboscs was divided up among these canoes, then with calabash bowls the water was scooped up and washed over the barboscs. Soon there was a milky water in the bottom of the canoe about a foot deep. The canoes took various posts and at a signal the poisoned water was thrown overboard. The roots were washed in this fashion 5 or 6 times, and finally, when the poison was all washed out, they were heaved overboard or thrown on the bank. We stood on the shore and, with the sun just right, took many pictures. The actual fishing was not very good. About 10 minutes after the poisoning of the lake was commenced tiny minnows began to float downstream, flopping feebly. Close examination of one I caught

showed the gills to be paralyzed, appressed closely to the body, so that the fish cannot extract oxygen from the water. Thus it is that the fish is not actually poisoned inside and made unfit for eating. Few fish more than a foot long were caught. The waters of the lake had risen, unfortunately, during the night so that the 100 manojas, which had been considered sufficient, was only half the amount that should have been used in the augmented waters. The small tributary had been poisoned and fishing here was the best. But there was more of the fighting for big fish on the part of the boys which we had expected. However, the main purpose of the party as far as we were concerned, the photographing of the poisoning the lake, was a success. Dr. Pardo then gave us a big almuerzo, the fish previously caught, small and fried crisp being

very tasteful. There was one dish new to me, said to be the big local dish, something like a meat loaf, about 5 inches high, with chicken, corn, and many other things mixed together, a very good concoction. We looked over an Indian blow-gun, a pipe about 8 feet long, $1\frac{1}{2}$ inches diameter at base. A wad of cotton is wrapped around the ~~the~~ an end of the "arrow", about a foot long, and a slight puff shoots the arrow thru the pipe. Objects at long distance away can be hit and there is the advantage that the animal does not take flight at a loud explosion.

We reached Yurimaguas about 3:30 and were greatly surprised to find S. there. The "Eliza", on which he had been traveling for three weeks in the upper Marañon country, made an unexpected call at Y., so, when he found we were still there, he got off. What an interesting trip he has had! Wish one of us might have been along.

to collect more. He got 130 numbers, five things, indicative of the many new specimens we might have found. The trip took him to the Pongo of Marseriche, at the head of navigation of the Marañon, up the R. Maronua to Parallel 4, and stops were made at the mouths of the R. Pastaza, ^{and} R. Huallaga, and at many other places along the Marañon. The "Eliza" was a trading boat and long stops would be made up some stream waiting for canoes with balets to arrive.

Tues. Sept. 9. Went out the same trail as took Sept. 7, farther along, and got several good trees and shrubs. Then cut over to the Tarapoto road, but it is too open there, and returned early to Y. In evening the Augustinas were around for bridge, our first game since reaching Peru, just five months ago today.

Tues. Sept. 10. Packed. Many plants yet to be dried and these we are putting either in boards or dried for

the "hot room" on the "Alberto", or in dress only to be changed daily. Sailed at 4 p.m., a big crowd to see the boat off. We have Camerote 2, the best of them.

Wed. Sept. 11. A day of slow steaming down the Huallaga, with innumerable stops for wood and cargo. At where half an hour's stop was made, Tony and I got off and found collecting very good.

Thurs. Sept. 12. We were in the Marañon when I got up. Traveling is more rapid today.

Fri. Sept. 13. Reached Tiquitos at 2:30 p.m. and soon were in our old home generously given us again by the S.O. Stoves rigged up. The Comandante of the "Alberto" dined with us and we then sat around the club talking.

Sat. Sept. 14. Not much to do while waiting for the plants to dry. Letters received yesterday were Mason (June 21) with memo by Morton & Wagner, Standley (June 24),

Macbride (July 1), Hopkins (June 26). Answered the first and last of these. Williams came in at dinner, having just arrived from the Rio Napo. He is collecting ^{many} wood specimens for Field Museum. Movie in evening.

Sun. Sept. 15. Answered Standley's and Macbride's letters. Soccer game in p.m. and good movie (The Mysterious Woman) in evening.

Mon. Sept. 16. Completed arrangements and packed for trip up the Rio Itaya, just above Quito, the mouth being within the city. Dr. Augustin has given us letters to dueños of two haciendas up there, and we plan to stay 5 or 6 days. A S.C. geologist, Kray, is living at our house. He had a breakdown up in the Marañon country; I met him there and saw him on his way to Tiquitos. He is very quiet, rather morose, and prances up and down the floor. Mr. Ker asked us to try to cheer him up, but he ~~doesn't~~ hasn't responded much to our invitations. Before dinner he went to the plaza with us and had some beer and cocktails. He and

Al played chess in the evening.

Tues. Sept. 17. Planned to get an early start but the usual delays made 10:30 the time of leaving. Al and I, Antonio, Emilio Young, the chief engineer of the S. O. boat San Miguel, Julio Farro, mechanic, were the party. Mr. Ker let us have a large canoe and outboard motor. The British Consul, Mr. Massey, came to the boat to ask us to examine the African oil Palm (*Elaeis guineensis*) introduced on the Flóring plantation. Noticed how the bank of the Amazon was failing in near Puerto Belém, near mouth of Taya. Stopped for lunch at Santa Rosa, a soap factory owned by Sr. Llegato (?). Would accept nothing for it but we gave him, ^{and} his family a ride upstream, towing their canoe. Reached Soledad about ~~3:00~~ 4 pm., presented our letter, then went on to San Antonio. Sr. Flóring is a jolly German, very amiable, speaking English. Hand up for food for our men tho' mixed strong cocktails. After dinner made us help him drink some of the beer we brought him. Developed into quite a talkfest on the

war, the Allies, etc.

Wed. Sept. 18. Al went off with Antonio into forest upstream and I with a local boy to forest inland, each of us getting a lot of numbers. In pm. Al went in ~~the~~ third direction while I took the motor canoe upstream. Strange how these "wooded banks" have such few plants in flower or fruit. Is it the inundation, lack of insects at low water, or what. Anyhow we got only a small number of specimens, but these were all new to us. One showing thing was a Leguminous vine, apparently closely related (if not it) to our cube.

Thurs. Sept. 19. Al and Flóring took the motor canoe on a cube-chase up to Peña Blanca, the guide claiming to have seen cube flowers on a chaco there. As usual none were found, the "old" being having been cut down. Antonio and I went by canoe downstream, but collecting as bad as yesterday afternoon. "Soledad" is quite a contrast to San Antonio, the only similarity being that both are owned

by Germans and everybody drinks. Here there is a large family, the decreto Dr. Enrique Pollet, and several sons and daughters, this wife having died two months ago. We eat at a large table in the big open building, the open fire being in the center. Small places are at each place at the table for guinea, bananas, and to lay knives & forks on. There are a fine thing, brought from Germany. Lots of good-looking, well-cooked meat was served. Made me think of descriptions of an English banquet-table. The men worked on my plants of yesterday and this morning. Dr. Pollet, with our engineer, went to ~~to~~ ⁷ quietos by canoe late at night. He got in in the afternoon.

Fri. Sept. 20. With a guide I went inland back of the house. Woods very good when not of the palm type. Back at noon and I went out in pm.

Sat. Sept. 21. Went along same trail as yesterday, twice as far, and found great vines of "barbosa", whether or

cuba or not I am not quite sure. Antonio climbed one tree 100 feet, bringing down a branch with apparently ~~young~~ inflorescence buds. Decided to return tomorrow. All went out in pm. Dr. Pollet returned ~~too~~ late in pm, with two exciting bits of news. Krey drowned himself from the San Miguel, his body later being found. The bank of the Amazon at Puerto Belém caused ice drowning several people.

Sun. Sept. 22. Started about 6:30 for the cuba section of the forest, Al, Antonio, two wood-shoppers, and I. Cut down a big tree, bringing down several other trees. Found the cuba inflorescence slightly more developed but wholly impossible to study. Left loaded about 12, going straight down to Siquito. By 5:30 had the stoves rigged up, and got dolled up for the first time in a week. Dennis must have had a hell of a time with the suicide of Krey. The body was brought back to

our house, coming while D. was peacefully typewriting. Here only two hours but the place smelled terribly. Movie in evening. Mail from Joyce & Wm.

Mon. Sept. 23. Worked on plants a.m. Visited Dominic and saw our cabin. Wrote for Webb, Wm., & Lept. of us.

Tues. Sept. 24. Mainly hanging around.

Wed. Sept. 25. " " " . Bought tickets, carrying a heavy load of silver to pay for them. Paper money is at a premium here. 600 soles were in silver, and the counting of it at the Booth here took much time.

Thurs. Sept. 26. Klug and I left early on foot for his shack at Mishuyaca. Dr. Guillermo Klug, if I have not already spoken of him, is of part German descent, his father having founded the Lina Botanic Garden. He devotes his time to butterfly-collecting, selling his specimens mainly in Germany. He has an hacienda on the Rio Taya, ^{about 15 km.} between the mouth and Soledad. He and Texmann used to work from there. ~~Take~~ ~~Take~~ Mishuyaca is about 15 km. south of

Quito, on the peninsula (or island?) formed by the Taya and Naray rivers, nearer the latter. The route follows the Carretera being built to the Pastaza, now completed, thru San Juan, San Juan Nuevo, to a little beyond Sierra Blanca a locality well-named because of the hard white sand everywhere, suggesting ~~that~~ ^{the region} this is an old lake bottom. Shortly beyond Sierra Blanca the highway, here only a clearing, veers to the left, our trail going to the right thru dense forest. As Klug and others had told me, we found the vegetation about San Juan quite different from what it was early in August. Many more flowers were out, and the wood did not penetrate into the woods much on the way out, the numerous run bes we got along this edge were quite new to me. We reached Mishuyaca about 11:30, four hours after leaving Quito. After lunch the man who had carried my luggage out returned to all with four bundles. Klug and I cut over to

the carretera and followed it out a ways. Found ~~these~~ two small barbacoa chacas. Klug's house is a 2-room shack made of palm ("") walls and a thatched (palm) roof. I slept in a hammock.

Fri. Sept. 27. Klug and I each took boys and went in different directions. He and I have made a tentative arrangement whereby he is to collect plants for sale to various institutions. Hope it works out well. I went over to Lake Mapacocha, then caressed down it ^{and} to the outlet to the Rio Nanay, a good-sized river much wider and faster than the Itaya. We did not go into it as my men were landmen, not boatmen, and I feared they would not be able to handle the little canoe in the swift current. Anyhow, the banks of this stream, and of the lake, were as destitute of flowers as those of the Itaya had been. Among the numbers along the lake were a legume with

large thick-coriaceous fruit and a light olive *Psycleria* (?) that pleased me especially. The woods we passed thru on the way to and from the lake were fair; had it not been the last Peru collecting for the expedition I could have obtained more numbers, but I ~~did~~ avoided re-collecting things which apparently were frequent in the general *Quito* region, and did not look too carefully for flowering aroids, as these take so long to dry. When I got back found Klug had collected a lot of good things for me. Apparently he has keen eyes and good discrimination, having, with one or two exceptions, brought in only new things. At Mapacocha I had bought a fish from an Indian, and this, fried crispy, we had for dinner. How good it tasted!

Sat. Sept. 28. We returned early to *Quintos*, getting only a few things en route. Putting this collecting in press took most of the afternoon. The

Citizens of Iquitos gave a dance tonight for the Peru-Colombian Boundary Commission now staying here. It was a very pretty dance, at the Club Internacion. The one invitations read for 10 o'clock it was after eleven before the dancing started. Mr. Ker introduced us to many of the people, and we had several enjoyable dances. The supper was wonderful, roast turkeys, young pigs, sandwiches, cakes, etc. spread out on large tables. How hard to realize all this was happening 2000 miles up the Amazon, in a region ~~to~~ 99 out of a hundred Americans would suppose was given over entirely to wild Indians and animals! As one man pointed out to me, consider the dresses worn by the girls. There are no regular dressmakers in Iquitos nor are ready-made clothes for sale. The girls get fashion books from Paris and New York and concoct gowns themselves. And they turn out simple, effective things,

things, quashing the whole effect something like a dance at the Pan-American Union, the similarity made greater by the liberality between the ball-room at the Club and the Hall of the Nations at the Pan-American building.

Sun. Sept. 29. Al and I went over to the Klugs for dinner - good feed. Mrs. Klug is a young, fascinating Iquitan and her sister, also there, is much like her. Afterward we danced to Victrola music, some of their records being very danceable jazz. The Al and I walked out toward Pucbana, to give me a chance to back in the Amazon — something not yet done tho I have lived on its banks some weeks, — and to collect the three numbers necessary to give us \$500 for our Peruvian trip and to bring my serial number up to 30,000. First we got a Smilax, with globose inflorescences about 2 cm. wide, then a tree with pinkish-white flowers,

the family not recognized; then a large Mimosa-type tree which we may have had before but certainly not with well-developed flowers. After the river we found a big Leguminous tree, with large purple flowers and 3-foliate leaves. This was surely new to our collection so we took it, and made it our 30,000, ditching an earlier seed number and substituting our fourth plant of the day for it.

Mon. Sept. 30. Much uncertainty as to the sailing of the Dominic and its destination. It is due to go to New York but rumors say it will return to Iquitos from Manaos for more Mahogany. The river is low and with a full load the boat cannot get over some shallow spots. So they may go to Manaos, unload, and get more wood at the mouth of the Naray where they are now loading. D. is going to N. Y., Al and I only to Manaos. But we hope the Caro go

straight there to avoid change of the large amount of baggage he is taking in. A three-weeks accumulation of Lima papers reached the Iquitos Club today, and then I ran over in the late afternoon. Stock market doing well; threatened Mohammedan war; Russia and China peacefully arranging the Manchurian matter; the Athletics continuing to win and the Yankees to lose; the opening of the League of Nations meetings; disarmament plans between the U. S. and Britain developing. Invited Mr. and Mrs. Ker to dine with us, and later we ate "nigrettes" at their home.

Tues. Oct. 1. The Dominic is positively to sail tomorrow as this is a day of packing. (So was yesterday, for that matter, for all baggage not needed for drying the last-minute plants was sent to the boat yesterday). Mr. Olson, our host at San Antonio, came to town,

the Itaya having risen sufficiently to allow his motor boat to make the trip. He came to see his friend Bock off, who is taking the same boat as we.

Wed. Oct. 2. Up early, and took off the last press, all being dry but two sheets of an avoid, these with we shall take with but "changing drivers" on the Dominic won't be much of a job. The Kers and Mr. Klug came down to see us leave (about 11:30) on the "Tapac-?", a small launch taking us to the Dominic at the mouth of the Nanay. She sailed soon afterward, and we were on our way down the Amazon - a month's trip to New York were we going direct, seven days to Manaus. A stupid trip, probably, the things brightened up when we found a good library of English books. There are two passengers beside ourselves, a German, Bock, and an Englishman. It is an English boat, ^a made-over German trophy. Quite a comfortable way to travel down the

Amazon, a relief not to be on a wood-burner with its numerous stops for cerca. Because of shallow water the boat anchored for the night, so many mosquitoes coming on that bars were necessary in the stateroom.

Thurs. Oct. 3. Raining hard. Finished "Huck Finn" and before starting another am writing in this journal. In two or three days - one does not know just when - we shall cross the line into Brazil, and the Peruvian part of the trip will be a thing of the past. Perhaps some general observations will be in order:
I. From the standpoint of botanical collecting it has certainly been a success. A very large part of the 8500 numbers were found in regions rarely visited by botanists, certainly in regions not represented by collections in the U. S. Taking the principal areas in order of the time visited we have: (1). Rio Branco. - The general region of the western slope of the

Andes readily accessible from Lima has of course been often visited. But many of the collectors have been there out-of-season, the dryness of those slopes for many months of the year leaving only a short time when collecting is prime. Apparently we were there at just the right time - the middle of April. (2). Tarma. - The vegetation here is not very rich, at the best. Several plants bear the specific name "tarmensis" but these come, in most cases, from the Province of Tarma, not the capital city. It is far above tree-line, but the many herbs and low shrubs were in flower, and I think the Salviacae and Scroph., among other things, will prove interesting. (3). Mt. Jaantay and puna flora. - The day's trip to the glacier near Huancayo, Mt. Jaantay, netted us a great number of the curious little plants, characteristic of the region just below snow-line. Many of the things suggest Macbride's

Huanuco plants, but even if they are the same, it is interesting to have them from so far south. (4). Huanta-Apurimac. So far as I know Weberbauer is the only botanist to work in this area, and I do not recall ever to have seen any of his plants from there. I suspect he made a hurried trip at the best. Doubtless we got many common things along the road, but surely Abe's fine collections from Kimpitiriki and the orchids and other groups found at Aina are well worth having.

(5). Chanchamayo. - The month at La Merced and the Rocene Colony was the longest time we spent in any one region. Opportunity was had for working very thoroly, at altitudes from 500 to 1500 meters, and the Macbride (and probably Weberbauer) have collected at La Merced, I doubt if they amassed anything like the material we did. The four days' collecting at Huacapistana and Carpapata brought in

much material from the mid-slopes of the Andes. (6). Picchis Trail to Masicca. —

I find no record of any botanist collecting before in this region, those who have worked in the Chanchamayo apparently never having gone further north, and those from Iquitos, like Lessmann and Ule, never having gone above Masicca. Poeppig followed the more western route of the Huallaga from Lima to Brazil. The vegetation of the Picchis Trail was so rich, changing with every kilometer, and the forests which we collected in on our extra-day stops along the route, presented such differing appearances that I believe on the whole this was our most valuable collecting. Certainly, including the work at Puerto Bermudez and Caluaparas this would be so. (7). Iquitos. — Until recent years this region has been comparatively unknown botanically. Ule and Lessmann have made fair-sized collections here but few of their numbers

are to be found in the U. S. Our September collections along the Taga and at Mishuyacu, added to the August ones made near Iquitos, will certainly bring to American herbarium hundreds of species not represented. (8). Yurimaguas. — This the forest here has a general resemblance to that about Iquitos the plants are, for the most part, quite different. Al's trip to Bolsapuerto, where the foothills of the Andes were reached, resulted in adding to the collections many plants not previously seen.

II. It is too early to judge of the success of the trip from the standpoint of cube investigations. ~~Because~~ ^{of} our failure to find flowers or fruit it surely cannot be called completely successful, tho' if from the large amount of material collected we are able to determine it with certainty, all ends are accomplished as far as finding out what the plant is. We know in what parts of Peru cube is cultivated; we have fairly reliable information

as to its cultivation in other parts. We know the manner of cultivation, habit, kind of soil preferred. We know of its abundance and of the amounts purchasable. We have a quantity of other information about other plants used as fish-poisons.

III. The cost of the trip has been much less than anticipated, due to the low cost of living in Eastern Peru. Nearly everything is much less than in Colombia, the difference being particularly noticeable in the following items: labor, river-steamer fare, excess baggage, lodging (this due to entertainment in such places as Tiquitos, Tarma, and the Perene Colony), and horses.

IV. Fortunately hindsight is easier than foresight, and looking back on the trip I can see certain things I would not have done, or would have done differently, had I been able to foresee everything. (1). Plans in Washington. - It was unfortunate more time was not available to look up Peruvian and

Brazilian fish-poisons, and to have had D's root samples analysed by Dr. Lewton.

With a clue to its being a legume of the *Fructicarpus* relationship I could have studied these plants more fully and

have had a more comprehensive knowledge of the group for help in the field.

(2). Equipment. - A detailed consideration of this subject will be made later; but those things stand out: We should have had four stoves, not two; 500 additional "boards" should have been sent (quite as a reserve; the press-cards supplied as should have been rejected as too weak, and strong ones substituted. (3). Personnel. - S. and I should have been alone on this trip. We certainly received little help from D. in the matter of general collections, and what he did in the way of cube investigation could easily have been done by us without much additional time or effort. To mix an unknown quantity (or, rather, one who, according to every indication, was our antithesis) with

the application of

two people who work as effectively together was ^{dangerous} unwise. D. should have gone to Brazil or the Guianas, and there obtained information on fish-poisons, or we should have gone to one or more of those places while he came to Peru.

One of the secrets of maintaining health in the Tropics is the having of place in mind continually, and this is impossible when people of such opposite temperaments are forced to live together intimately for several months. To say that a give-and-take policy and mutual consideration of the other will solve the problem is all very well, but sooner or later trouble will arise.

That D. and I have kept well and accomplished so much is due to the fact that by luck and by arrangement we have been alone a certain part of the trip. I could enlarge on this theme but what's the use? As I write, the dam has burst, and I doubt if all my tact and ingenuity can prevent a disagreeable trip down the Amazon, stay at Manaus,

and unfortunate results when we all get home. It was a hard situation, having him on the trip. Older than I, for many years a schoolteacher and accustomed to ^{company} ~~order~~, and far more familiar with the Spanish language than I, he rather assumed the lead at the outset. For the first six weeks I neglected to assert myself but when I found, ~~along~~ about June 1, that when anything went wrong, he would blame me, I took over everything, and ran things as they should be run. The Huanta trip was a huge mistake, but I agreed to it only because D. thought it so important. I felt we should not waste time in long travels to the south but concentrate in working the ^{Huanta} Quito region. Botanically the trip was a success but as far as furthering our cubic knowledge materially it amounted to little. Had we not gone to Huanta we could have carried out our original Tarapoto plan. As it was, I did all I could do to prevent D.

wasting our time in the Puerto Ocopa, -
Río Tambo country in aimless
investigations. Except for the Huanta trip,
D. has done no real exploration work. In
fact, he has had it pretty soft - many
days at his old school at Huancayo;
weeks in Lima; an air ride of $2\frac{1}{2}$ hours
to cover a route we needed a month to
complete, and that of the hardest of
mule work; three weeks with a river-steam
as a ~~boat~~ home while he was living in
Bataapuerto and I was living in
stacks on the ferrovía near Yurimiques.
In fact, the only thing he has done that
savors of real work, since the Huanta trip
in May, ~~was~~ was the few rides ^{and} ~~and~~ walks
he made to the San Juan region, ^{to get cube information},
on our arrival at Iquitos, and, later, the
drying of roots in the sun at Iquitos.
Meanwhile, he has been reading historical
books, writing comments on them, preparing
papers on the Tacna-Arica question, and
typing ~~two~~ ^{two} accounts of articles on various
subjects for his local Towa paper. Had

the success of the expedition been forecast in
his mind he would have offered to take a
press and a boy and do some collecting.
It was a thing I could not very well
order him to do. The valuable material he
collected on his trip to the Pongo, this probably
only a small part of what might have been
collected, shows what he could have
done had he wished to devote time to the
work.

(4). I should have arranged with Mr.
Mayon as soon as airmail service was
established between New York and Lima that
all our letters should be sent by this
airmail. Thus I should have been able
to keep in touch better with Washington;
should have known the progress made
in the identification of our cube
material, and have had quick replies
to my requests for instructions.

V. The trip completed carried out, with
certain exceptions, the ~~go~~ places outlined
in a general way before leaving. Because
of the nature of the investigation to

be carried on the itinerary was sketched only roughly, details to be left to the necessities of the situation arising in the field. The trip was to take ^{not more than} eight months, including the time spent in travel ^{between} ~~and to New York~~ and from and back to New York. Sailing on March 28 we were due back on or before Nov. 28. with a view to investigating the occurrence of cube in northeastern Peru and making general botanical collections ⁱⁿ the regions visited, our plans called for a few days on the Pacific slope of the Andes; a week or so at Taruma (while D. was obtaining information from his agents in Huancayo), about a month in the Chanchamayo; a slow journey over the Pichis Trail and down the rivers to Iquitos; sufficient time at Iquitos, where cube was ~~that~~ to occur in considerable quantities, to make a thorough exploration; then Yurimaguas, and the Tarapoto section. The nearly five weeks consumed in the Huanta trip, already referred to, from about April 23 to

May 27, necessitated the elimination of part of the project, were to return by Nov. 28. The plan of slow progress from the Chanchamayo to Iquitos was retained for the first portion half of the route, to Moisés, but from there on the regular steamer was taken instead of a chartered launch. Infrequent steamer service from Iquitos up-river (we reached there Aug. 1 and could not leave till Aug. 17) further delayed us. The discovery ^{regular} that steamers for Para left Iquitos only on the 27th of each month meant that to do the Tarapoto trip we should have to wait for the Oct. 27 boat, and not get home till after Nov. 28 (much after should it develop the additional work must be done in Brazil). We reached Yurimaguas Aug. 22 and, perhaps foolishly, spent those weeks with that as a base, the character of the jungle about Yurimaguas and between that city and Babahonda indicating exceptionally good collecting. All plans were made for going to Tarapoto, five or six days of waiting

distant, when I decided ~~to~~ it was not feasible to undertake this further work at this time. As I write now, I wonder if I made a mistake. We had had our hearts set on the historic Tarapoto region, and botanists back home were eager to have us make collections there. But I just had the feeling that the project was too big to tackle at the end of a long trip during which thousands of miles had been traversed. To have gone to Iquitos direct from New York, via Pará, and then penetrated to the Tarapoto-Moyobamba-Chachapoyas country would have been a pleasure. And our corrugated boards were so sand up that it would have been difficult to dry large collections speedily. Moreover, we learned certain things that made me judge that at least some work was necessary at Manaus and Pará. Perhaps we should have gone to Tarapoto anyway. Maybe the "boards" would have

held out; perhaps I should have had a recrudescence of energy with the wonderful collecting there; perhaps the Museum would have agreed to my returning a month or six weeks later. Well, it's too late to change now!

Fri. Oct. 4. All day yesterday it rained, often in torrents. Frequently soundings were taken and once a launch was put out to take soundings ahead. Today is cloudy but without rain so far. Unusually cool for the Amazon, and some even have on blue suits. The books in the ship's library and those lent us by Mr. Besse, one of the passengers, have helped kill time. At 4 pm. reached Latecia, the border town in Peru.

Officials came on and fooled around. Too late to cross the line and have the Brazilian inspection, so we remained anchored for the night.

Sat. Oct. 5. At 7:30 AM. we had crossed the boundary into Brazil, and were anchored off the settlement of Tabatinga.

Just a few houses, and a "fort", a stone blockhouse. The boats probably don't come regularly often than once a month, the officials of course couldn't be buried, so it was nearly 10 before we proceeded on our way down the river. Frequent soundings, necessary. Many islands, and what look like mouths of rivers, tho they may be only the ~~other~~ ends of channels around the islands. Fine weather. About noon passed thru the shallow stretch near Esperanza, another Brazilian Customs town, where a stay of several hours was made.

Sun. Oct. 6 - Wed. Oct. 9. These days are all alike, just steaming down the Amazon, the river all the time growing wider and straighter. The weather has been surprisingly cool; once or twice heavy winds and rains have come up, reminding one of squalls at sea. Habitations are few; the forest does not look as dense or as interesting as farther up, tho possibly this is because

the banks usually are so far from the ship. No signs of life - no crocodiles, no monkeys; no birds. Occasionally a butterfly or a flying grasshopper comes on board. The last two nights we have run all night.

Thurs. Oct. 10. Today we expect to reach Manaus, and then for customs and baggage worries! Shortly after noon had one of the biggest thrills of the trip, the passing from the brown waters of the Amazon into the black waters of the Rio Negro. The line of demarcation is very distinct, and the two run side by side, as far as one can see, beyond the junction. Went up R. Negro about 7 miles and landed off Manaus about 3 pm. A big city with fine buildings of varied architecture and color. Looked like a big seaport, among the cliffs docked there being the big "Hildebrand" for Liverpool, "Swallow" for N.Y., "Beefly" for Rio. Customs and doctor took some time but no baggage passed till tomorrow. After supper on board we then went

ashore, registered at Grand Hotel (proprietor knows Bill Mann, MacCough, Tate, Rice, etc.) Saw a very U.S. movie, a baseball game. Went with Boch & Bessey, but we three were among the few in the audience who could understand it. Then an auto ride to Flores, a "joint", dance-hall, player piano, women, and much liquor. We stayed only a short time, and left B. & B. to finish out the evening.

Fri. Oct. 11. Manaus is quite a town - some 80,000 people, good streetcar service, well-paved streets, many autos, modern docks, good roads radiating out into the country. Rushed around in morning to see about baggage, but not till p.m. that it went thru the Customs. Officials were all right, and speeded things along, once they got started. Called on the manager of the street-car company, E. B. Kirk, an American. Very pleasant and offered us his launch to go up Rio Negro. Also called on Mr. George Huebner, to whom we had a letter from Mr. Klug. He is a German, long

resident here, an orchid collector. Has a place up and across the river, and we shall go there Monday. Brazilian money is strange; a milreis (1000 reis) = about 13\$. Coins run ~~face~~ 100 reis, 200r, 400r, 500r 1 milreis, 2 MR, and ticks up to 1000 MR. Drew money at bank (Mr. Blake, Director). D. was busy all day with the transfer of his voluminous baggage from the "Dominie" to the "Hildebrandt." Absolutely one of the finest dinners I ever had was given by Boch tonight - his birthday. The Captain, Chief Engineer of the "Dominie", Bessey, Al, and I were his guests. Boch surely knew how to order, and just the right wines with each course - champagne cocktail to start off and champagne toward end. Afterwards we two broke away and visited D. on the "Hildebrandt", seeing a prize-fight by its crew. This is a fine steamer, the queen of the Booth Line boats. Later I joined the rest of the birthday party, not getting in till 3:30 a.m., my latest on the whole trip.

54
Sat. Oct. 12. Saw the Hildebrandt sail in am., carrying all our ^{traveling} companions ~~for~~ the "Dominic". Mr. Kirk drove us around to the boat we are to use, showed us his larger launch, being remodeled, which we travelled to the Barbados in. He is an enthusiastic yachtsman. Had luncheon at his house, another wonderful meal, chicken, pork, the best macaroni I have ever eaten, and a sweet pudding. Lots of coffee. Then we read Sunday "Times" up to Sept. 1. Mr. Kirk took us later to the English Club and got us cards. They have a country club called the Bosques - tennis and swimming, but I never got out to it.

Sun. Oct. 13. ~~Mr. Huebner took us to~~ the Agricultural ["] Mr. Huebner dined with us, also Miss (Dr.) Snethlage, a Swiss entomologist, an extensive traveler in Brazil (we had just read about her in the April 1926 Nat'l Geographic). She is a charming woman. Formerly was director of Goeldi Museum; now at

55
Museu at Rio. After dinner we all called on Dr. Adolpho Ducke, the leading Brazilian botanist, to see whom we had planned to make a special trip to Rio. Luckily he arrived today ~~as~~ on his way up the Rio Negro. He must be 7 feet tall - a very clever botanist who specializes in the river trees.

Sun. Oct. 13. Mr. Huebner took us to the Agricultural Experiment Station to find out if any "tubos" was growing there. There was none but there were many interesting species of Hevea and Theobroma. Collected about 25 numbers, am first Brazilian collecting. Dr. Ducke and Mr. Seisser, the manager of Beringer ~~Co~~ Co, were there.

Mon. Oct. 14. With Mr. Boy, a friend of Huebner's, as a guide, we went in Mr. Kirk's launch across the river on our first tubo-chasing. The Rio Negro is several miles wide here. At the second farm we enquired at we

got a big kick from seeing two plants of "timbo legitimus", our old Cube A, of Peru. The plants had been set out on the farm and were apparently about a year old. No flowers or fruit, nor could we get any information about them. Growing abundantly on this farm was another species of *Louochocarpus*, ^(L. gracilis) a true vine, and it had flowers and fruit. Then we went to Huembes's ranch, Uypiranga; fine cement houses; had lunch, saw "timbo legitimus" and the same *Louochocarpus* seen earlier in the day. Then went upstream as far as the Japanese Colony, formerly a prison; turning back has stopped at a place near the begining of a channel and saw thousands of plants of a *Louochocarpus* (*L. negrensis*). The flowers are larger and the fruit longer than in *L. gracilis*. Made one other stop on the way back and here found *Derris negrensis*, the genus being distinguished from *Louochocarpus* by

having winged fruit. Crossing the river was quite exciting as the waves were very high. Got well soaked and it felt good after the intense heat of the day.

Tues. Oct. 15. While Al but in yesterday's plants, I went out about 5 Km. beyond Flores by auto, and walked back to Flores. Whenever the road would dip down to swampy land the collecting was good, but the edge of the woods at the higher parts of the road were junk. In the swamps got *Xyris*, *Paepalanthus*, *Utricularia*, *Mapanea* (?), etc. In the evening we called on Dr. Duske with our specimens of "barbacoa", or "timbo" as it is called in Brazil. He at once said Cube A was not *Louochocarpus nicou*, as we had that, but he did not recognize what species it was in the absence of flowers or fruit. So we are just about where we were before!

53
Wed. Oct. 16. In the afternoon we went by auto about 5 Km. beyond Villa Municipal. On the whole the collecting was poor. This near vicinity of Manaus is second growth vegetation, and at the end of this very dry season there is little in flower. Collected only two packages and put these in at the end of the afternoon so that tomorrow could be free.

Thurs. Oct. 17. Thinking over that plantation across the river where so much *Touchocarpus regnansis* was growing, we decided we should have some roots of it. So all went over in the Kirk's canoe, and dug up a lot. Reported there were high seas on the way back. I had my most interesting collecting in Brazil to date - a trip to the falls of Iquumá with Dr. Ducke. It was a privilege to be out with the man who knows the Amazonian trees better than anyone living. He had along his expert boy from Rio and a boy

54
for me. Both would climb up trees over 100 feet high, or if they could not get specimens this way, they would shoot branches off. And of course sometimes they would cut the tree down. We left the auto about 20 Km. beyond Flores, then walked the remaining 10 Km. to the falls. The road ran thru virgin forest, with great trees 100-150 feet high. Ducke uses a field glass, and decides whether the flowers, high up, are worth collecting. It was fun to have him hand me a specimen, and say it had first been collected by Spence, and not found again till the (Ducke) had located this tree; or to show me a tree belonging to a new genus of Kuhlmannia, or a new *Mimosaceae* described by himself. ~~to~~ ^{to} ~~the~~ The falls are beautiful, sort of a horseshoe, tho only a small stream pours over the bank during the dry season. Here were two species of *Paepalanthus*, an *Tridacca*, a blue *Utricularia*

60
suggesting L. resupinata of the New Jersey pine barrens, and an interesting Sennitaceous plant. From the falls we swam ~~also~~ around along a wood trail for several Km. back to the Flores road, where a car met us at 4:30 pm. Collected about 100 numbers, all good things. Found quantities of Lorochocarpus variolous and a sterile Lorochocarpus strongly resembling our Cube A, but with ~~grasses~~ slender rachis and petioles.

Fri. Oct. 18. To our disappointment Lampert & Holt had not received a reply to their wire to Para asking permission for us to take the freighter "Swinburn" to Para. So we had to arrange for the Amazon Navigation Company's ship, the "Districto Federal" leaving this evening. The morning was given over to putting in yesterday's plants and the afternoon to packing, paying bills, etc. We are leaving Manaus

61
rather sooner than we had expected but this makes us enjoy our stay here all the more. After many days in a ~~large~~ South American city the place gets stale and you feel you are outliving your welcome. So we left Manaus at 9 pm. on ^{the} ~~the~~ good-sized river steamer, watching the bright lights fade away, with pleasant thoughts of the fine town 400 miles from the mouth of the Amazon.

Sat. Oct. 19. This boat is quite good, much larger, ~~than~~ than the upper Amazon boats. Breakfast as usual only bread and coffee, but lunch quite ample. Had a hard time drying diaries as the wind was terrific. Finally put the presses in the "hot room" around the two smokestacks. For reading material we have four books lent by Mr. Kuh. About 11 am. stopped for wood, not starting again till 3 pm. After a brief hour's run we stopped for more wood, waiting here ~~at~~ 1 1/2 hours; so we move

or very slowly during the day time, making good time only at night.

Sun. Oct. 20. At daybreak stopped at a large town. Don't know the name of it. No map on board nor could we buy one in Manaus. What a terrific wind there is all the time! Certainly the best entry trip down the Amazon is all applesauce! At a wood stop early in the afternoon I inquired about "timb." Not grown in these parts. Guruna is our last chance, apparently. About 8 pm. reached Obidos, the second largest town (I think) which we stop at between Manaus and Para. A pretty sight brilliantly lighted. A full moon was arising just about then. About midnight took on a lot of cattle. Rather an exciting task as the ~~boat~~ steamer could not get anywhere near the shore because of low water; the animals were chased into the shallow water, one at a

time the long rope attached to their heads gradually tightened so they were brought alongside a row boat, then forced into deeper water, in which they swam toward the lighted shib, and were hauled up. Sometimes they would start swimming downstream, carrying the row boat with them.

Mon. Oct. 21. More of the same - good time while moving but long stops for wood, heavy winds, cool. After lunch went ashore at a wood stop on a fruitless timb chase, letting myself be led by a dumb kid fully 2 km. inland to see "juruca"; which turned out to be *Bixa orellana* instead of "timb yurucu"; (*Touchocarpus nicosiai*). Coming back alone got on the wrong trail and had a few minutes of unpleasant feelings that I would miss the boat. At 4:30 reached Santarem, a town

of R. Tafejos, the largest town en route. As at most of the other towns the steamer could not tie up, so hawsers had to be made by tenders. Many went ashore and I am damn sorry I did not. Looked like an interesting town. We are acting like a couple of homesick fools, impatient of every stop, refusing to see anything of the interesting country we pass thru, just sulking on the boat.

Tues. Oct. 22. I shall take advantage of the absence of anything new to write about to mention a few incidents of recent happening overlooked in writing earlier (1). The peculiarities of dress, noticed among Peruvians but accentuated in Brazil, give me a mixed feeling of irritation and humor. The most sacred garb is the Coat. One is respectable only if he has on a coat; one is a low-down bum, a humble peon, if he

wears only a shirt. To be a Coat ~~at~~ a thing need only to be cut in the general style of a coat - that is, a row of rather large buttons and a row of buttonholes down the middle. It may have a V-shaped neck or a straight one. It may be a pajama top. Sometimes it is difficult to say when it is a coat and when a shirt; guess it depends on whether it hangs over the trousers or is tucked in. In going into the woods at Manaus I naturally didn't wear a coat; ok in auto which took me out but on the streetcar coming back the conductor would inform me that people without coats had to ride on the back platform with the peons, cangaderos, etc. The first time I argued a bit and he finally let ^{the} it slide. But arguing was so tiresome I decided to follow orders next time. When Al and I were coming back once and were told

to beat it to the back platform, we did so, then tendered the conductor a 100 miles note, saying we were rich gentlemen and had nothing small. Spoke to Mr. Kirk, humorously, about this fool rule, and he said he was recently chased back by one of his own conductors. A close second to a coat is a hat, tho here there is perhaps some justification because of the intense heat of the sun at Manaus. When we would go about bareheaded, people would talk to us about it. Going without ties also seems to arouse the Manausians. God, these people are as bad as the English about dress. So far this is the only thing that makes me feel glad to be a resident of the States. On board this ship people go around in pajamas nearly all day long, but look at us if we ~~were~~ show up at

meals without coats. (2). There seems to be two complete soccer teams on board. At wood stops they get off and have a game. A rather scurrilous bunch, several of negroid complex.

Wed. Oct 23. Today we are making pretty good time, with comparatively short stops for wood. The three rather large presses we brought on board are drying very well in the "hot room".

Finished "Heirs Apparent," the third book loaned by Mr. Kirk, and, as the fourth one is a childish book and impossible to read, I now have nothing more to read. Late at night passed Gurupi, the place where Dicke found "tibia legitima" (*L. micro*) in flower and fruit, and at which we had hoped to stop. So we shall have to come back from Pará, unless we can find it nearer.

Thurs. Oct. 24.

Wed. Oct. 23. Stopped at 10 a.m. for wood, and I collected about 25 numbers. Glad to have this chance as the habitat is quite different from Manaus. We are now in a channel from the main Amazon to the Atlantic (or, rather, to the Rio Pará), a tidal channel and the forest a wet jungle. The trees bear many epiphytes, ferns, aroids, and bromeliads, reminding me most of the Puerto Arturo vegetation. Still no news about the bô here.

Thurs. Oct. 24. Today we are due to reach Pará, but God knows whether we shall or not - such delays! Have with the following on board: cards to H. L. E., Mrs. Culver, Maude Gray, ~~H. F. S.~~ Fair; letters to Shaeffer & Moore. Reached Pará about 3:30 pm; no delay at customs. Called at Consulate & S. O., getting mail. Staying at Grande Hotel, a pretentious hotel, with elevator, waiters in black & white, good meals.

Fri. Oct. 25 - Fri. Nov. 15. These three weeks spent waiting for a boat for U.S. Rather trying end to the trip, for Pará is too large a city for a good collecting headquarters, nor could we leave for any length of time as one could never get reliable news as to boats. Many days were so uneventful that a daily record of our doings is not worth while. However, to mention a few things:

Pará as a city. - 200,000 population; many street-car lines, mangos the popular shade tree; fish-market, with numerous sailing boats alongside, interesting; exporting, importing, & shipping biggest industries.

Goeldi Museum. Located in zoological Park. The gor is well kept up, many birds in cages, some monkeys or other animals, and snakes. A part of trees in the park bear labels. There is no regular botanist at the Herbarium now, the appropriation which had permitted Huber & Druebe to do their fine work being cut off. The herbarium is in large tin insect-proof boxes, with plenty of camphor scattered within, and no sign of

insects. Unfortunately many of the boxes are not labeled, and the contents are somewhat mixed up. The herbarium is chiefly of Huber, Ducke, Ule (including Peru), and Baker collections. We photographed many types. M. Chemeont is librarian and in charge of herbarium.

The great Carnaval. — This was going on when we arrived, a big street fair, with many go-rounds, gambling games, bright lights, and music.

Oct. 25.

Cube search. Dr. Alfredo Mesquita, the manager of the Standard Oil Co. here, arranged a trip out along the road to Pinheiros to get "timbo". Picked up various people en route in auto, and finally a native showed us "timbo". There were three kinds, Clibadium surinamense (fruit used), Cracca toxicaria, and Cracca (probably nitens?). The man knew of "timbo" legitimo, and promised to bring some to us. Oct. 26. This man brought a package to the hotel, and it gave us a big shock to myself at. The plant was an old Cube A. We arranged to go out to the spot and get roots. Oct 29. Went out to the

place, which is southeast of the point known as Tapera, on the Pinheiros road. Plants had apparently been planted, though they were in dense woods. The first seen had by far the largest leaflets of any we had ever found, tho clearly the same species. Farther eastward we found 30 or 40 plants, and dug some 25 Kg. of roots.

Nov. 1. Beringer & Co., to whom we had a letter from their Manaus agents, wired their people at Breves to bring specimens of "timbo" to the boat Jupiter. Al took this Oct. 31, and was given the specimens (leaves & a few roots, no fls. seen). Proved to be Cube A. Nov. 3. At Gurupá, the locality for "timbo urucu" (Psychotria urucu), discussed by Ducke, Al was taken to the very plant from which Ducke collected specimens. Apparently is not our Cube A. He also collected Cube A, there known as "timbo". The plant has the main stem with many lateral branches, all way to top; in "Cube A" there is a main stem, + leafy, branching only near top. Leaves of L. urucu smaller and not long-acuminate.

General Collecting.

Oct. 25. Al and I got a few things in addition to timbo along Pinheiros road.

Oct. 27. I took the Souza carline to end of route, walking on to Entracorvento, a station ^{on} along the Bragança R. R., getting about 65 numbers. Probably common things mostly, but nearly all were new to me.

Oct. 29. Al and I got about 70 numbers in the dense forest south of Tapauá and Pinheiros, while on the cube hunt.

Nov. 2. I took Santa Izabel carline out to end, but found everything cleared. Got only a few numbers in thickets.

Nov. 3-5. The U. S. Consul, Drew, recommended the hotel Chaperi Virado, on the Ilhado Mosquero, some 25 miles below Pará, as a good place to loaf and probably to collect. Left Pará 6 a.m. Nov. 3, arrived at Mosquero (by excursion boat; fare 1 MR) at 8:30. Took bus to hotel, and by 9 was walking along the wonderful sandy beach the fringes the whole

island. From the start collecting was good. In pm. walked back along track, cutting over to ocean west of the Chaperi. Nov. 4 ~~Following the road~~ (with an Englishman, West) the 5 miles to Moquero, along the road, returning by the shore. In the pm. we went east along the beach a long distance, driving good. Large number of Leguminous trees in flower. Altogether got 200 numbers. Retained 6 a.m. Nov. 5.

Nov. 1 - Nov. 5. Al went back up the river to Gurupá, to look up timbo. Collected many other things in the dense forest about Gurupá.

Nov. 7. I went by auto a short distance along the Pinheiros road, to real muddy tidal swamp, the only habitat of this bird visited this trip. Got only a few numbers, special things I wanted, as we did not wish to accumulate much fresh stuff.

Nov. 8-11. Al and I went Nov. 8 at 4 pm. to Moquero, this time made of a good

joyous loafing trip than a botanical expedition. Just laid around naked in the sandy, swimming, ~~and~~ bucking the breakers, and getting tanned. A fine end to a long trip. We phototoed a few of the things collected on my earlier trip, and got about 25 additional nos. Three misinformation we went to Maracaibo for a boat on Nov. 11. pm. As there was none we got on a sailboat and sailed back to Piñeros (halfway to Pará), then took bus in. This added another mode of conveyance to our long list.

Nov. Nov. 15. After four days of the most aggravating hanging around the ~~High~~ we finally boarded the "High," of the American Brasil line, a shipping Board boat, and day! Warned of this I laid in a stock and I hope it will last to the States. It is a boat of 3000 tons, but is very lightly loaded, and pitches and rolls in the calmest

of seas. There are 6 other passengers, 4 women among them. We have the cooks' rooms, quite comfortable. The Captain, a New York State, Johnson, is very intelligent. Meals are exceptionally good. As the labels for our collections up to Aug. 15 ~~are~~ were extracted from the mails the day before leaving, we have these to work upon, and we hope the at least 14 day trip won't go too slowly.

At mouth of Rio Para morning of 16th and got off pilot. At 3:30 pm. crossed the Equator, taking photos. Nov. 17 and 18 quite rough and much rain, but from then on the finest weather possible, the sea very blue and no motion to the ship. Our routine is this: breakfast 7:30 to 8, label-writing (with beer) to 11 am; lunch 12-12:30; label-writing till tired of it; reading on deck; dinner 6 pm; all at pinochle and bridge from 7 pm. on; I reading till 9, and then to bed. Capt. Johnson a good egg, and he and I discuss affairs between 7 and 8 each evening.

Nov. 23 sent radios to family, Mayr, and Hopkins. Nov. 25 finished writing labels.

Miscellaneous Notes

- For financial statement see back of this book.
- The following are the principal botanical groups represented in our collection:

Lower cryptogams	448	4573
ferns 927	927	
Araceae 26	264	
Gramineae	209	
Orchid	335	
Piperaceae	531	
Loranthaceae	48	
Mimosaceae		
Cesalpiniaceae		
Fabaceae 252	179	
"Cuba 1" 71	340	
Other "cuba" 17		
Sapindaceae	83	
Passifloraceae	124	
Melastomaceae	395	
Ericaceae		
Vacciniaceae	47	
Cordia & Journeforia	64	
Labiate	64	
Solanaceae	250	
Scrophulariaceae	121	
Gesneriaceae	144	
		4573
Acanthaceae	222	
Rubiaceae	574	
Toboliaceae	59	
Compositae	423	
Total	5851	
or 63% of the total collection of 9167 numbers.		
Number days in field		over
Peru 1750 173	49	pl. perda.
Brazil 445 43	15	

3. Fish-poisons collected:

Following numbers are "Cube A"

22913	27362	29279	30585
23053	369	280	608
878	380	529	
26200	425	668	
369	427	752	
490	504	759	
494	565	816	
501	566	917	
527	994	957	
547	997	30025	
612	28008	026	
692	158	028	
712	211	038	
837	255	041	
841	300	074	
886	325	081	
893	458	110	
895	586	137	
945	621	177	
27096	812	191	
137	29061	192	
159	066	241	
278	110	576	

Leguminous Fish-poisons, other than "Cube A"

22300	25134	27092	30233
	558	489	503
23189	719	28459	234
	645	731	28811
800	26608	29677	

Non-Leguminous Fish-poisons

22014	25401	27837
25376	26834	30232

4. Itinerary and collections.

Date	Place	Days	Means of travel	miles of travel	No. days	No. plants collected en route	No. with fixed base coll. en route	No. with fixed base fin. base
From	To			of vapor	days	per day	per day	per day
Mar. 28 - Apr. 9	N.Y.	10	Lima	Steamer	3363	12	20	
Apr. 9 - " 10	—		—	—	5	—	—	10 Lima
Apr. 10 - 11	Lima	1	R. R.	75	1	5		
15-17	—		—	—	2	25	235	Río Blanco
17	Río Blanco-Oroya		R.R.	55	1 1/2	2		
17	Oroya-Tarma		Auto	30	3	—		
18-23	—		—	—	6	—	—	17 Tarma
24	Tarma-Concepción		Auto	55	1	30	24	
25	—		—	—	1	37	37	Concepción
25	Concepción-Huancayo		Auto	20	3	1		
26-28	—		—	—	2	—	130	Huancayo
29	Huancayo-La Mejorada		R. R.	46 ⁺	1	35		
30	La Mejorada-Huanta		Auto	90	1 1/2	3		
May 1-2	Huanta		—	—	2	—	1	Huanta
3-7	Huanta-Aina		Mule	45	5	33	1	
8-16 (K)	—		—	—	9	395	375	Aina
8-9 (S+D)	Aina-Kimpitiriki		Mule	22	2	58		
10-12 "	—		—	—	3	208	208	Kimpitiriki
13-14 ..	Kimpitiriki-Aina		Mule	22	2	41		
17-19	Aina-Huanta		Mule	45	3	138		
20-22	—		—	—	3	—	11	Huanta
23 {	Huanta-La Mejorada		Auto	90	1	2		
	La Mejorada-Huancayo		R.R.	46	3			

* 10 mi. on foot because of wreck

665 1182

From	To	From	To	Means of travel	Miles of travel	No. Days	No pl. cost. in route	No pl. cost. at base	lunch base
May 24 - May 26	—				3		2.5		Huancayo
27	Huancayo - Tarma			Auto	75	1	2		
28	Tarma - La Merced			Auto	48	1	4		
29 - June 13	—				—	16		1100	La Merced
June 5 & June 8	La Merced - Carapata o ret.			Auto	56	④			Huacapitana o Carapata
	—				—	③		432	
June 14 - June 27	—				—	14		514	Colonia Perené
28 - July 8	Pichis Trail			Whele	125 194	7	337		Yapas, Encinas, San Nicolas, Sta. Rosa.
	—				—	3 1/2		464	Pto. Yessup
July 9 - July 12	—				—	4		179	
July 13	Pto. Yessup - Pto. Bermudez			Canoe	13 20	1			
14 - July 17	—				—	4		284	Pto. Bermudez
18 - " 19	Pto. Bermudez - Caluapanes			Canoe	25	2	24		
20 - " 21	Caluapanes				—	2		113	Caluapanes
22 - " 25	Caluapanes - Masicca			Launch	250	2 1/2	12		
25	Masicca -				—	1/2		32	Masicca
26 - July 31	Masicca - Iquitos			Steamer	744	6	19		
Aug. 1 - Aug. 17	—				—	17		619	Iquitos
18 - " 22	Iquitos - Yurimaguas			Steamer	450	4 1/2	35		
22 - Sept. 9	—				—	18 1/2		971	Yurimaguas
26 - Sept 1 (acs)	Yurimaguas - Balaspuerto Ret.			Foot	105	⑤		608	
	—				—	②			Balaspuerto
Sept. 10 - " 13	Yurimaguas - Iquitos			Steam	450 744	3	28 26	1115	6523

		Means of travel
1 Aug. 20 - Sept. 8 (W.J.D.)	9 quitos - Manáos - Yurupá	Steamer
Sept. 14 - Oct. 1	—	—
Oct. 2 - " 11	9 quitos - Manáos	Steamer
" 12 - " 17	—	—
" 18 - " 24	Manáos - Pará	Steamer
" 25 - Nov. 15	—	—
Nov. 1 - " 5 (asc)	Pará - Gurupá or R.R.	Steamer
" 16 - " 29	Pará - New York	Steamer

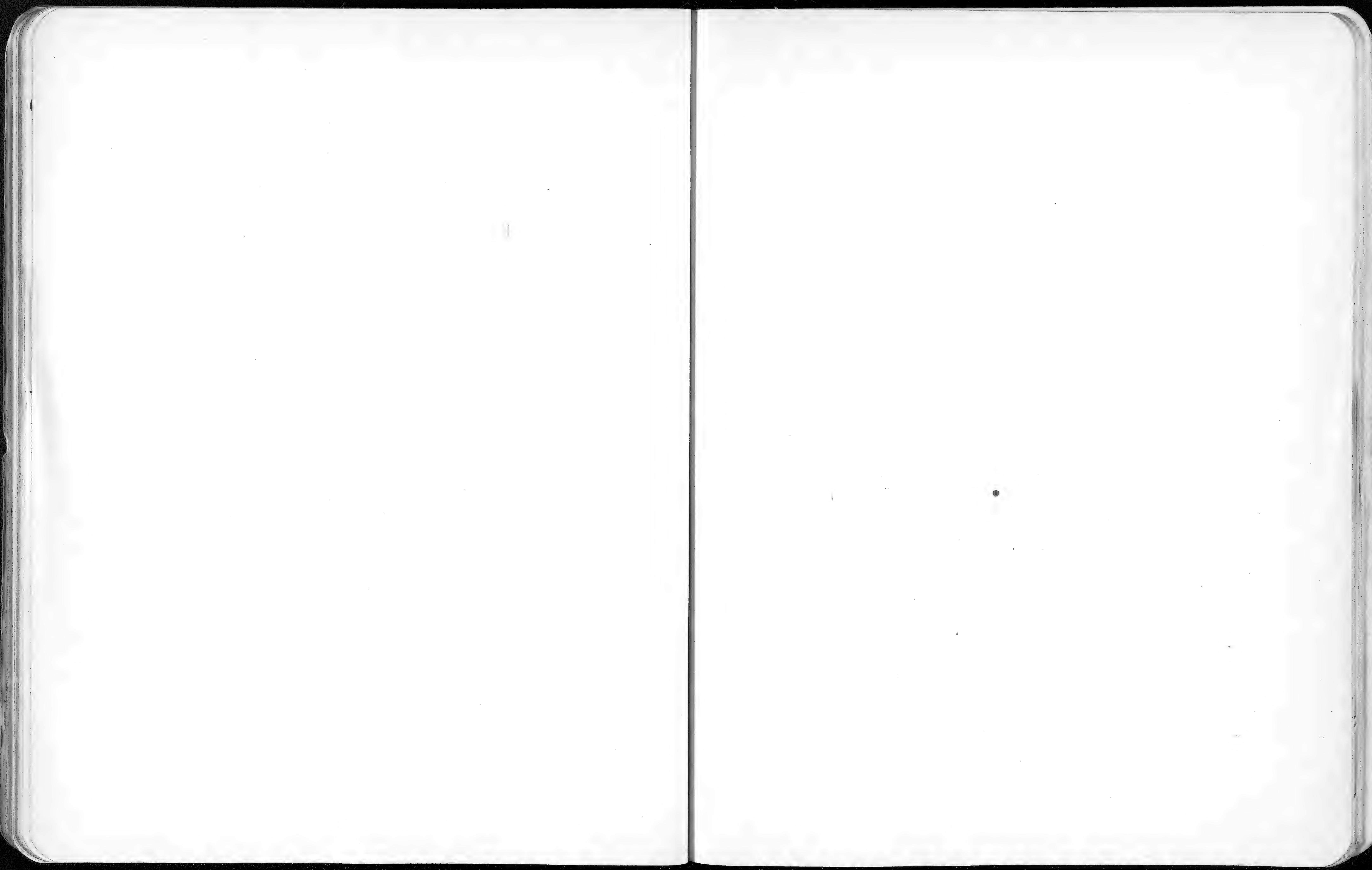
	miles of travel	no. days	no. plants en route	no. plants from base	with base
	753	19	134	523	
	—	17		720	9 quitos
	1248	9			
	—	6		205	Manáos
	855	26	26		
	—	22		384	Pará
	500	4			7 quitos
	—	1			
	2800	14	2800	50	Gurupá
				1275	7892

Mileage Ocean steam	6163
By steamer miles	5000
By steamer ^{for} for 1163	
" launch	250
" canoe	38
" mule	259
On foot	105*
By auto	464
" R.R.	222
Total	<u>12501</u>

Days of Travel	
Collecting impossible	34
" possible	46
	77
Days with lodgings.	170
	146
	58

Average plants per day en route, collecting possible	27.7
Average plant per day from fixed base	54.0

* Including only direct places of travel



Transportation

7 Tape	1.00 ✓	6/26 Tolla	✓ 1.00	
	5.70 ✓	7/14 Tolla to Cough	✓ 60.00	
	3.00 ✓	7/27 Tolla	✓ 1.00	
	2.70 ✓	7/28 as	✓ 1.00	
	1.00 ✓	7/29 H. May. (1)	✓ 16.90	
	1.00 ✓	7/30 as	✓ 32.00	
7-1000	82 ✓	Tolla	✓ 6.00	
2.000	37.50 ✓	7/31	<u>297.05</u>	
1.000	1.00 ✓	7/31	2.50	
10.000	26.90 ✓	7/31 H. May. (1)	27.00	
2.000	3.00 ✓	7/31 as	69.40	
7.000	12.00 ✓	Tolla	11.00	
13.000	2.00 ✓	7/31 as	6.50	
7.000	2.00 ✓	7/31 H. May. (1)	40.00	
8.000	2.00 ✓	Tolla	4.50	
Day	0.50 ✓	7/31 as	4.00	
7/26 Tolla	6.00 ✓	7/31 as	5.00	
7/27 C-14 (1)	10.00 ✓	7/31 as	8.00	
7/28 Tape	10.00 ✓	7/31 H. May. (1)	26.00	
7/29 H. May. (1)	6.00 ✓	7/31 as (Vega)	4.00	
7/30 C-14 (1)	10.00 ✓	7/31 H. May. (1)	28.00	
7/31 H. May. (1)	20.00 ✓	7/31 H. May. (1)	16.90	
7/31 C-14 (1)	10.00 ✓	7/31 Tolla	1.00	
7/31 H. May. (1)	8.00 ✓	7/31 as	4.00	
			<u>179.15</u>	
			<u>214.45</u>	

Transportation

Baggage Transportation

Baggage Transportation

Slipment Specimens tr. 5

Board & Lodging

Board + Lodging

<u>Board & Lodging</u>				
46.00				
.20	6/5 8 Flavon 1-1da	3.50	7/2 Bed & Breakfast	50.00
.20	6/7 Flavon 2-2da	16.50	7/9 in Taos	100.00
4.00	6/13 7 M. 1-1da	209.00	The Inn at Taos	5.00
2.00	6/14 - 2-2da	5.50	The Inn	1.60
14.00	6/15 8 (1)	1.50	July	<u>15.10</u>
.30	6/24 5 Blank (2-13)	1.50	8/9 quote 3-6da	89.40
.20	-	1.00	8/10 in 3-6da	32.00
5.00	6/25 8 Japan 2-1da	17.50	8/11 Yunnan 3-4da	23.50
70.00	6/26 10 Taiwan 1-1da	5.10	8/12 " " 8/13	5.00
6.00	6/27 - 1-1da	3.35	8/14 -	5.00
5.00	6/28 -	3.50	8/15 6/20 -	5.00
10.00	6/29 8 (1)	10.50	The Inn 1-1da	<u>10.50</u>
.80	6/30 - (Blank)	120.00	Aug.	<u>18.60</u>
1.20	<u>June</u>	<u>47.55</u>	<u>9/5 Yunnan</u>	<u>15.00</u>
.40			8/6 10/10	<u>12.00</u>
.50	7/2 Canada 2-1da	36.40	8/10 Yunnan (Blank)	<u>15.00</u>
15.00	7/6 10/10 2-1da	11.80	9/5 - (Blank)	<u>5.00</u>
5.00	7/13 8 (1) 2-1da	8.60	9/10 in (Blank)	<u>13.50</u>
1.00	7/16 8 (1) 2-1da	8.00	9/10 in (Blank) + 30.00	<u>30.00</u>
<u>207.00</u>	7/17 8 (1) 2-1da	8.00	9/11 10/10 11/10 12/10	<u>18.00</u>
	7/18 8 (1) 2-1da	17.00	9/12 quote 10/10 11/10 +	<u>2.00</u>
	7/19 8 (1) 2-1da	26.00	105.70	<u>105.70</u>
	7/21 8 (1) 2-1da	10.00		
			<u>224.05</u>	
			269.00	

Board & LodgingExtra Provisions

10/17 qm. 7/10m.	66.40	4/11 Camp food	✓ 7.60	✓ 26.00
10/2 1/2 21/6	8.00	4/20 Fuel	✓ .20	✓ .20
6/27	17.00	4/22 -	✓ .30	✓ .30
	4/23		✓ .05	
6/6 20.00		4/23 Camp food	✓ 33.50	
20.00		4/24 -	✓ .35	
6/7 5.50		4/25		8.00

4/26 Trip4/274/28 Camping4/29 Fuel4/304/315/15/25/35/45/55/65/75/85/95/105/115/125/135/145/1540.90

5/15. Keweenaw	
5/16 -	
5/17. Omena	
5/18 -	
5/19. -	
5/20. -	
5/21. -	
5/22. -	
5/23. -	
5/24. -	
5/25. -	
5/26. -	
5/27. -	
5/28. -	
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5/30. -	
5/31. -	
6/1. -	
6/2. -	
6/3. -	
6/4. -	
6/5. -	

Extra Provisions

4/20 no		12.00
✓ 2.00	4/26 Fried	✓ .50
.60	4/27 -	✓ .60
.60	4/28 -	✓ .60
.60	4/29 -	✓ .60
.70	4/30 -	✓ .70
.50	5/1/1	✓ .50
.90	5/1/2	✓ .90
3.00	5/1/3. Round moon	✓ 3.00
.10	5/1/4. Hike by 9.25	✓ .10
3.00	5/1/5. Hike	✓ .20
.10	5/1/6 -	✓ .10
.65	5/1/7 -	✓ .65
.20	5/1/8. Hike	✓ .20
1.00	5/1/9. Hike	✓ 1.00
20.65	5/1/10 Aug.	✓ 20.65
.30		
.60	9/1-9/5. Hike	✓ .60
4/6 40	9/6 -	✓ .90
3.00	9/6. Hike trip	✓ 3.00
2.00	9/6. Hike moon	✓ 2.00
5.00	9/6. Hike trip	✓ 2.00
✓ -	9/7. Hike	✓ .10
.40	9/7. Hike	✓ 6.40
.20	9/24. Fried	✓ .50
.60	9/27 -	✓ .50
✓ 2.00		✓ 47.20

Extra Provisions47.00Misc. Supplies

.35

.10

47.50

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Misc. Supplies

Wk 6-15-20	2.00
Wk 6-22-20	1.70
Wk 6-29-20	3.60
Wk 7-6-20	2.20
Wk 7-13-20	2.00
Wk 7-20-20	12.30
Wk 7-27-20	2.00
Wk 8-3-20	1.50
Wk 8-10-20	1.50
Wk 8-17-20	13.60
Wk 8-24-20	6.50
Wk 8-31-20	6.50
Wk 9-7-20	6.50
Wk 9-14-20	6.50
Wk 9-21-20	6.50
Wk 9-28-20	6.50
Wk 10-5-20	6.50
Wk 10-12-20	6.50
Wk 10-19-20	6.50
Wk 10-26-20	6.50
Wk 11-2-20	6.50
Wk 11-9-20	6.50
Wk 11-16-20	6.50
Wk 11-23-20	6.50
Wk 11-30-20	6.50
Wk 12-7-20	6.50
Wk 12-14-20	6.50
Wk 12-21-20	6.50
Wk 12-28-20	6.50
Wk 1-4-21	6.50
Wk 1-11-21	6.50
Wk 1-18-21	6.50
Wk 1-25-21	6.50
Wk 2-1-21	6.50
Wk 2-8-21	6.50
Wk 2-15-21	6.50
Wk 2-22-21	6.50
Wk 2-29-21	6.50
Wk 3-7-21	6.50
Wk 3-14-21	6.50
Wk 3-21-21	6.50
Wk 3-28-21	6.50
Wk 4-4-21	6.50
Wk 4-11-21	6.50
Wk 4-18-21	6.50
Wk 4-25-21	6.50
Wk 5-2-21	6.50
Wk 5-9-21	6.50
Wk 5-16-21	6.50
Wk 5-23-21	6.50
Wk 5-30-21	6.50
Wk 6-6-21	6.50
Wk 6-13-21	6.50
Wk 6-20-21	6.50
Wk 6-27-21	6.50
Wk 7-4-21	6.50
Wk 7-11-21	6.50
Wk 7-18-21	6.50
Wk 7-25-21	6.50
Wk 8-1-21	6.50
Wk 8-8-21	6.50
Wk 8-15-21	6.50
Wk 8-22-21	6.50
Wk 8-29-21	6.50
Wk 9-5-21	6.50
Wk 9-12-21	6.50
Wk 9-19-21	6.50
Wk 9-26-21	6.50
Wk 10-3-21	6.50
Wk 10-10-21	6.50
Wk 10-17-21	6.50
Wk 10-24-21	6.50
Wk 11-7-21	6.50
Wk 11-14-21	6.50
Wk 11-21-21	6.50
Wk 11-28-21	6.50
Wk 12-5-21	6.50
Wk 12-12-21	6.50
Wk 12-19-21	6.50
Wk 12-26-21	6.50
Wk 1-2-22	6.50
Wk 1-9-22	6.50
Wk 1-16-22	6.50
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Purchase Cube & other Poisons

Help & Tips

Keep & Dip

This image shows a document page that is severely faded and overexposed, making the text and markings very difficult to read. At the top, there are faint traces of what might be a title or header. Below this, there are several small, dark, scattered marks that could be initials, numbers, or checkmarks. In the lower portion of the page, there are two distinct sets of faint, handwritten numbers: '62.3' and '7'. The background is a light, mottled grey, and the overall quality is that of a low-light photocopy or a very old photograph of a document.

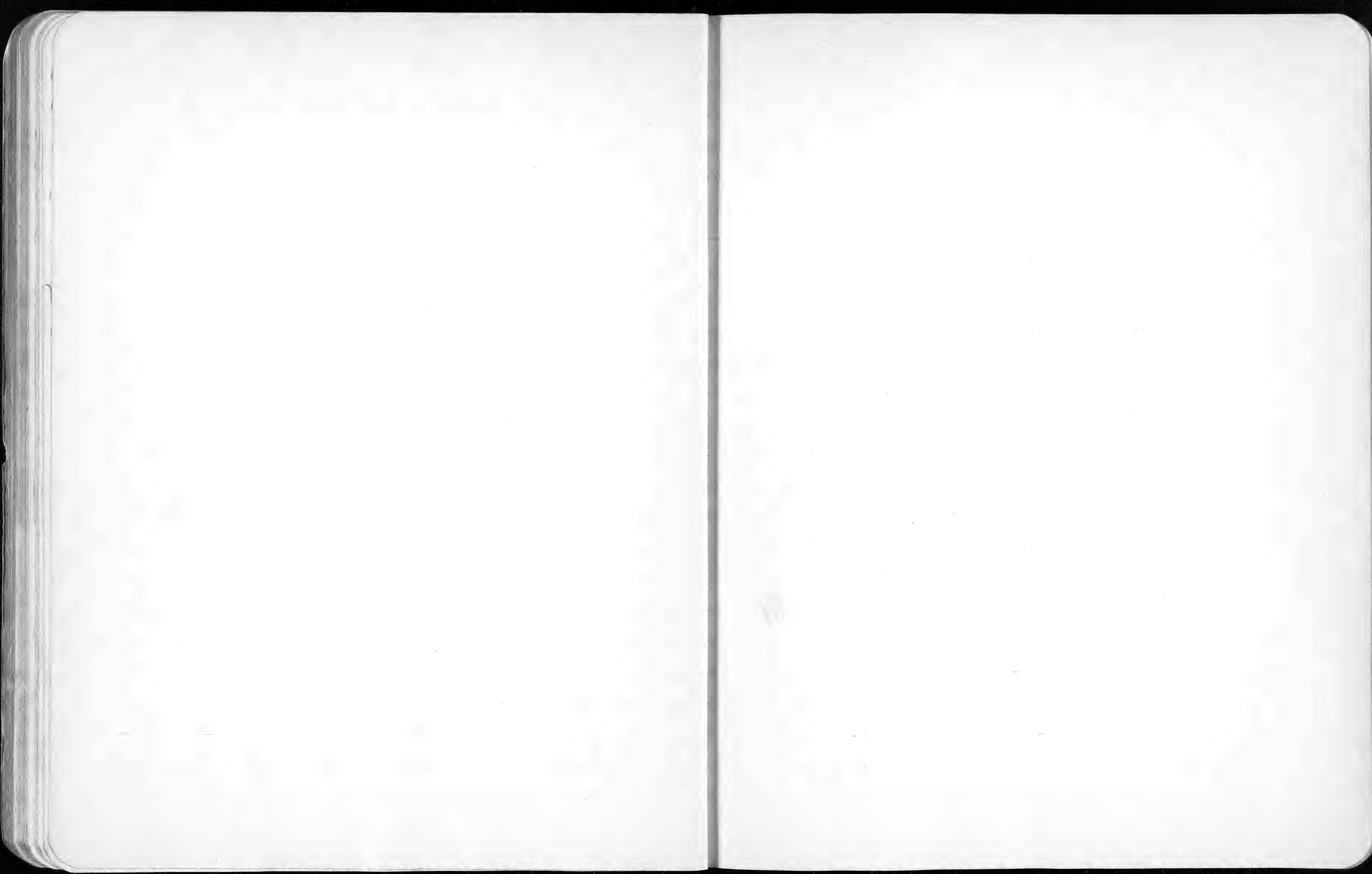
Receipts
Sept 9 - Oct. 10

	Debit	
Transportation	3301.35	
Flight fare	314.10	
Bus & bldg	1924.25	
Extra meals	247.00	
Meat & fish	386.40	
Cat	147.60	
Cake etc	171.55	
Wife	587.40	
Gasoline	260.45	
Gas. Receipts	320.46	
total	1140.66	
	+ 27.00	
	1167.66	
Entertainment	15.26	
Meat & fish	549.70	
Transportation	181.20	
Baggage-transport	12.50	
Bus & bldg	2.80	
Extra meals	141.20	
Meat & fish	145.00	
Wife	301.10 ✓	
Gasoline	135.00	
	5655.20	

	Dollars & Pennies
	10/11 Carfare
	Bus fare
	10/12 Taxis & cars
	Auto
	10/13 Carfare
	10/14 Bus
	10/15 Receipts
	10/16 Auto
	10/17 Auto
	10/18 Carfare
	10/19 Bus fare
	10/20 Taxis
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Merchandise

10/10 Postage	✓ 1.60
10/10 Telegram	✓ <u>7.80</u>
10/10	<u>8.40</u>
11/8 Catalog (Waltz)	✓ 46.70
11/12 Passport vision	✓ 30.00
✓ Michael 100 lbs	✓ 30.00
Betty's clothes	✓ <u>30.00</u>
Nov.	126.70
Oct.	<u>8.40</u>
	<u>135.10</u>



Cambridge Exptl. Kit 4 sub
Hunt field notes (photo, lat)
✓ ✓

1943

